

MATH 110.3 (05) T1, 2004-05: CALCULUS I

Quiz Two - October 19, 2002 - 30 Minutes

No books, notes or calculators are allowed. Encode your student number in the upper left corner of the opscan sheet. Print your name in the space indicated at the top of the opscan sheet. This is a multiple-choice computer-marked quiz. Use a soft pencil. Return only the opscan sheet. Keep the question sheet and the scratch booklet. Each answer is worth one point. The possible answers for each question are

A) 0 B) 1 C) 2 D) 3 E) 4 F) 5 G) 6 H) 7 I) $-\infty$ J) ∞

(1) $\sin(\frac{\pi}{2}) = a$ where $a = ?$

(2) $\cos(\frac{\pi}{3}) = \frac{1}{a}$ where $a = ?$

(3) $\tan(\frac{\pi}{4}) = a$ where $a = ?$

(4) $\ln 1 = a$ where $a = ?$

(5) $e^0 = a$ where $a = ?$

(6) $\sin^{-1}(\frac{1}{2}) = \frac{\pi}{a}$ where $a = ?$

(7) $\cos^{-1}(\frac{1}{2}) = \frac{\pi}{a}$ where $a = ?$

(8) $\tan^{-1}(1) = \frac{\pi}{a}$ where $a = ?$

~~(9) $\lim_{x \rightarrow \infty} e^{-x} = a$ where $a = ?$~~

~~(10) $\lim_{x \rightarrow \infty} \tan^{-1}(x) = \frac{\pi}{a}$ where $a = ?$~~

~~(11) $\lim_{x \rightarrow 0^+} \ln x = a$ where $a = ?$~~

~~(12) $\lim_{x \rightarrow -\infty} e^{-x} = a$ where $a = ?$~~

~~(13) $\log_3 3^4 = a$ where $a = ?$~~

~~(14) $7^{\log_7 2} = a$ where $a = ?$~~

(15) If $f(x) = \frac{1}{3}x + 1$ what is $f^{-1}(4)$?

$\log_{10} 100 = 2$

$\log_b x \rightarrow b^x$

$10^2 = 100$ $\log_3 81$

3^4

-3

$\log_3 81 = x$

$3^4 = 81$

$x^y = b$

$\log_b (b^x) = x$